Nova Scotia Health

CardioVascular HEALTH NOVA SCOTIA Bulletin

IMPROVING CARDIOVASCULAR HEALTH OF NOVA SCOTIANS

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Welcome to the Cardiovascular Health Nova Scotia (CVHNS) e-mail bulletin. The Bulletin has been created to share information about the program's activities, related cardiovascular health initiatives, and ideas from around the province. The Bulletin is published quarterly.

EXERCISE: UNDERPRESCRIBED IN NOVA SCOTIA

While the cardiovascular benefits of exercise are widely accepted, its benefits are frequently underestimated as a therapy and therefore frequently under prescribed. Less than 50% of Canadians report engaging in regular physical activity and our Nova Scotia statistics suggest an even poorer percentage. We obviously have to do a better job at selling the benefits of exercise.

A complicated societal evolution in the food and nutrition industry coupled with a marked reduction in physical activity has led to an epidemic of obesity which increases the risk of hypertension, diabetes, dyslipidemia and subsequently cardiac disease and stroke. These same risk factors also increase the risk of renal failure, peripheral vascular disease, joint injuries, retinopathy and a multitude of other adverse health effects. On the flip side, research suggests that healthy eating and regular physical activity can reduce the risk of disease. The INTERHEART[1] Health Study showed that regular exercise (self-reported) reduced the risk of a heart attack by 14 percent. The combination of regular fruit and vegetable intake along with exercise, modest alcohol consumption and not smoking can reduce the risk of a first heart attack by as much as 80 percent.

Regular physical activity along with dietary restriction has been shown to reduce the development of new diabetes in high risk individuals by over 50 percent.[1,2] Exercise reduces blood pressure and hypertension and is also important for both weight loss and maintaining weight loss. Other important and often unrecognized benefits of exercise include prevention of cancer, reduced risk of infection and improvement in the immune system. Increasing physical activity can also improve mental function, reduce mild forms of anxiety and depression, improve sleep patterns and even with fairly modest increases in exercise habits, increase perceived general energy.

There is a clear dose response curve with exercising and preventing cardiovascular disease that has been noted in both men and women. A proper prescription for exercise includes instructions on appropriate frequency, length and intensity. It is also important to recommend a variety of activities to help maintain interest. While the minimum acceptable amount of exercise is 30 minutes a day most days of the week; 60-90 minutes is

more appropriate if attempting to lose weight, maintain weight loss and/or improve health status. Intensity of exercise can be measured in several ways. The most objective measurement is heart rate: 65-85% of maximum target heart rate (220 - age = maximum target heart rate) is usually recommended. The Borg Scale of perceived exertion can also be used to define intensity- the person is asked to describe exertion on a scale from very light to very, very hard work.

Not everyone is ready and willing to exercise. It is possible to assist patients in moving through the stages of change with properly supervised exercise to reach the ultimate goal of exercising regularly without thinking about it! There are many possible areas for improvement related to physical activity for all age groups in our society. Public-private partnerships should be explored to improve resources in our communities from preschool to high school and beyond. More green space, bicycle lanes, walking paths, and enhanced exercise facilities will help improve access to appropriate recreational opportunities for all Nova Scotians.

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References:

1 Yusuf S, Hawken S, Ounpuu, S, et al. Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. *The Lancet*. 2004;364:937-952.
2 Tuomilehto J, Linstrom J, Eriksson JG, et al. Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *New England Journal of Medicine*. 2001;344;1343-50.
3 Knowler WC, Barrett-Connor E, Fowler SE, et al. Reduction in the incidence of type 2 diabetes with lifestyle or metformin. *New England Journal of Medicine*. 2002;346:393-403.

Learning Opportunities

Upcoming Events

International Stroke Conference 2008,
February 20-22, 2008, New Orleans, LA.
www.strokeconference.org.

ACC.08 57th Annual Scientific Session,
March 29-April 1, 2008, Chicago, IL.
resource@acc.org.

European Stroke Conference, May 13-16, 2008, Nice, France. www.eurostroke.org.

Canadian Perspectives on ACC.08
April 25, 2008, Toronto, ON.
www.ccs.ca.

Safer Healthcare Now National Learning Sessions & Canadian ICU Collaborative,
March 31-April 2, 2008, Winnipeg, MB.
www.saferhealthcarenow.ca.

Preventive Cardiovascular Nursing Association 14th Annual Symposium,
April 24-26, 2008 Orlando, FL. www.pcna.net.

Stroke 2008, August 13-15, 2008, Sydney, AU.
www.strokesociety.com.au.

What's Working in Community Development, June 23-25, 2008, Wolfville, NS
www.horizonscda.ca.

CVHNS News

Nova Scotia Stroke Audit
The final report of the audit of all admissions for stroke and TIA in fiscal 2004/05 will soon be available. DHAs were provided with a report of their own DHA data during recent consultations regarding enhancing the stroke system. The audit findings were used to assist planning for required enhancements to the stroke system in Nova Scotia and will be used as the baseline for ongoing monitoring.

Best Practice Guidelines Soon to be Released
Both the Acute Coronary Syndrome and the Stroke Care Guidelines are under final edit and formatting. Once finalized, guidelines will be available through our website. As well, a limited number of print copies will be made available. Initial work has started on a plan for a coordinated approach to local dissemination and implementation of the guidelines. Hats off to those DHAs who have already started planning strategies to implement guidelines and improve care!

Nova Scotia Stroke System Enhancements – Next Steps
Consultation meetings regarding enhancing and reorganizing stroke care have been held in 8 of the 9 DHAs in the province. Districts have been invited to submit proposals to develop district stroke programs, as outlined during the consultations. A forum was held on February 15, 2008 in Halifax to assist DHAs with developing their plans through sharing successful planning processes and program models. Full stroke program implementation across all districts is expected to take several years to accomplish.

Living Well with Chronic Disease: Community Partnerships for Improving Service Delivery

The Diabetes Centers (DCs) of South Shore Health (SSH) through partnership with SSH Primary Health Care have been busy collaborating with community partners around improving service delivery for people affected by chronic disease along the South Shore. This is a project supported through one of the annual Diabetes Care Program of Nova Scotia (DCPNS) grants for 2007.

Focus groups conducted with clients of the Diabetes Centers in 2006 identified that clients wanted a program that provides:

- a multidisciplinary approach
- frequent interaction
- knowledge and information sharing to aid in the management of their disease
- group modular teaching.

Before developing new programming solely targeted at Persons with Diabetes, the DCs invited community partners to collaborate to identify a community-based program aimed at persons affected by chronic disease. Partners include but have not been limited to the Diabetes Center, Primary Health Care, Asthma Care Center, SSH Cardiovascular Health and Wellness Program, Continuing Care, QE2 Diabetes Case Management Program, NS Dept of Education Adult Education, YMCA Lunenburg County, Primary Mental Health Care, VON Lunenburg Queens, SSH Bone Health Committee and CVHNS. After compiling an inventory of services already provided by the various partners, the purpose of the program has become to establish a coordinated approach of providing

community-based wellness education for people affected by chronic disease on the South Shore.

Partners have been engaged in program planning since initially meeting in mid June and are currently working through the goals and objectives. A program profile and a logic model are under development.

If you would like more information about this project please contact either of the Co-chairs: Heather Hopkins at 1-902-634-8801 ext 3210 or Matt Naugler at 1-902-543-4604 ext. 2222.

Helpful Resources

New Definition of MI
Thygesen K, Alpert JS, White HD, et al. Universal definition of myocardial infarction. *European Heart Journal*. 2007;28:2525-2538.

New Hypertension Guidelines
Rosendorff C, Black HR, Cannon CP, et al. Treatment of hypertension in the prevention and management of ischemic heart disease. *Circulation*. 2007;115:2761-88.

Heart Failure Websites for Patients, Families and Caregivers

- Visit the Canadian Congestive Heart Failure Clinics Network www.cchfcn.org.
- The European Society of Cardiology's recently advertised a new website 'Heart Failure Matters'. www.heartfailurematters.org for more information.

Position Paper on Dietary Fatty Acids
Dietitians of Canada (DC) and the American Dietetic Association recently published a new position paper on dietary fatty acids. DC has also produced a simple fact sheet based on the position paper. Visit www.dietitians.ca for copies.

New ESC Prevention Guidelines
European Guidelines on Cardiovascular Disease Prevention in Clinical Practice are available on the ESC website under the ESC guideline section. Visit www.escardio.org.

Canadian Heart Health Strategy (CHHS)
The CHHS recently posted their consultation report on their website. Visit www.chhs-scsc.ca for details.

Health Canada Release
The office of Nutrition Policy and Promotion recently released *Canada's Nutrition and Health Atlas*. This web based tool is available electronically at http://www.hc-sc.gc.ca/fn-an/surveill/atlas/index_e.html.

Cardiometabolic Risk Resources
The International chair on cardiometabolic risk now has a website, www.cardiometabolic-risk.org and newsletter.

Food Guide Servings Tracker
Health Canada has just posted a new resource to support Canada's Food Guide on their website. www.healthcanada.qc.ca/foodguide.

A Comprehensive Workplace Health Strategy for Nova Scotia
This strategy was recently released and is available on the web along with tools and resources as well as a spotlight section for N.S. businesses with workplace health programs. www.thrivingworkplaces.ns.ca.

Healthy Living E-bulletin
The Public Health Agency of Canada has just released a Healthy Living E-bulletin to promote physical activity, healthy eating and healthy weights across the country. www.phac-aspc.gc.ca/hp-ps/ebulletin/index-eng.html.

Walkabout Website
Heart and Stroke Foundation, Nova Scotia Department of Health Promotion and Protection and the Ecology Action Centre launched a 5 year initiative in October to increase the number of Nova Scotians who walk 30-69 minutes per day. Visit www.walkaboutns.ca for details.

Innovative Ideas

Investing in Heart Healthy Children: A Community Project
There is an escalation of diseases in children such as obesity and Type 2 diabetes, which, along with inactivity and unhealthy eating, are precursors to the development of coronary artery disease (CAD). Our multidisciplinary group developed a 3 year research project to target children though education and enabling in an effort to alter this debilitating life course. Project goals include (1) change the culture at school and home that has led to an epidemic of CAD in Atlantic Canada, (2) initiate primary prevention of acquired heart disease by educating elementary school children and their caregivers about modifiable risk factors, (3) give people the expectation of, and tools for, establishing a heart healthy lifestyle.

Using "Survivor Teams", the children's physical activity levels and pedometer readings are tracked as they virtually walk across Canada. Motivation is provided monthly through Spirit Assembles with an Olympic Boxing Champion. Education forums tailored to each grade level are held twice a year for 3 years, focusing on heart anatomy, exercise physiology, risk factor modification, smoking and nutrition. Pre and post tests are administered at these sessions and to date indicate improvement of knowledge in the majority of students. Parental surveys are administered twice a year to assess care-givers impressions of their children's health and activity level. Nursing students developed tool kits for parents and caregivers to assist with healthy lifestyle choices.

Working with school staff, school board, Department of Health, and other partners, this project aims to enhance a healthy lifestyle for children at school and home to prevent or reduce the increasing prevalence of CAD. For more information contact: Gillian Yates at jill.yates@cdha.nshealth.ca.

South West Health Advocating for Smoking Cessation
According to the World Health Organization, smoking or tobacco use is the single, largest preventable cause of disease and premature death. In Canada, approximately 45,000 people die yearly as a result of smoking-related illness and quitting is the single most effective thing that a person can do to enhance the quality and length of their life. The risk of developing a smoking-related disease or dying is continually reduced as abstinence increases. Therefore, SWH will be joining other Health Authorities within the province, by implementing policies to promote smoking cessation for the patient population it serves.

Health care professionals see patients who are ill due to smoking or tobacco use on a daily basis and are in the position to promote and assist patients with quitting. SWH will be implementing an "Ask, Advise, Assist" approach with all patients admitted to hospital. All patients' tobacco use will be screened on admission and all tobacco users will be advised that the most important thing that they could do to protect their health would be to stop smoking or using tobacco products and as well, their readiness to quit will be assessed. Nurses will further assist the patient who identifies they are ready to quit by providing education materials and work in collaboration with physicians (for Nicotine Replacement therapy if indicated) and by making referrals to the Community Addiction Services (for post discharge follow up counseling). Those patients who identify that they are not ready to quit will also be provided with education materials to increase their awareness of the importance of quitting.

We now know that smoking is an addiction and quitting may be extremely difficult, but screening, exemplifying the benefits of quitting and offering assistance, be it ongoing counseling or nicotine replacement therapy, or other medications, will increase a person's chances of success and better health. Relapses are a normal part in this process and research has shown that the more attempts a person has made to quit, the more likely they will be successful in the future therefore smoking cessation interventions will be addressed and assistance offered with every admission and repeat admission to a facility in SWH. For more information contact: Kathy Boudreau at kaboudreau@swndha.nshealth.ca.

Your Questions Answered

When can a patient who experienced an acute myocardial infarction (AMI) return to driving?

It is at the discretion of the physician to advise each individual patient when it is appropriate for them to drive again; however, it is recommended that a patient who holds a class 5 drivers license abstain from driving anywhere from one to three months after an AMI. Patients who have experienced an uncomplicated AMI may be able to return to driving within 4 to 6 weeks after the heart attack but those who have had complications may have to wait up to three months before driving again. In addition patients whose occupation is driving (taxi cab or hold a Class 1, 2, 3 or 4 license) should not return to work related driving until three months post AMI.

Are TZDs safe to use in patients who have had an MI?

This is a complicated question keeping in mind that the overall risk of MI is very, very low and large trials are still pending. Generally speaking, if the person's ejection fraction is low or if s/he has heart failure, **no**. If s/he was recently started on a TZD and subsequently had an MI, **no**. If the MI is remote, and the person has been on a TZD for years, it is likely safe.

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